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EXAMINER

PHAM, CHRYSTINE

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2192

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/028,152

Applicant(s)

RODI ET AL.

Examiner

Chrystine Pham

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This action is responsive to Amendment filed on January 4<sup>th</sup> 2005. Claims 1-15 have been amended. Claims 1-17 are presented for examination.

***Response to Amendment***

2. In view of the amendment of claim 2 to remove grammatical error, objection of claim 2 is hereby withdrawn.
3. In view of the amendment of claims 1 and 6, rejection of the claims under 35 U.S.C 112 is hereby withdrawn.

***Response to Arguments***

4. Applicant's arguments filed January 4<sup>th</sup> 2005 have been fully considered but they are not persuasive.

The Applicants essentially contend that "*Lewis' spreadsheet, in fact is two spread sheets for a single timing diagram; a library spreadsheet and a parameter spreadsheet (col.7, lines a5-7). In Lewis, each of these spreadsheets have separate program-like existence, but both of which function together as a part of the single unified system without any independent existence*" (page 7, 5<sup>th</sup> paragraph). The Examiner strongly disagrees. In col.8:26-37, Lewis specifically discloses an operator (i.e., user) entering commands to edit a spreadsheet (either the Parameter spreadsheet 38 or the Library spreadsheet 40). The editing functions include creating or deleting variables from the spreadsheet. It is very clear from the passage that the editing (i.e., operating) of one spreadsheet is independent (i.e., "independently operable), has no effect, and makes no reference to the other spreadsheet. In response to Applicants' argument that Lewis utilizes two spreadsheets per timing chart as opposed to the claimed "single spreadsheet file", it is submitted that the Lewis Library spreadsheet 40 is not linked to the timing diagram. The Library

spreadsheet's sole purpose is to serve as an online reference book in which data can be quickly retrieved and imported into the Parameter spreadsheet 38 for use in generating timing diagrams (see at least col.4:25-37; col.7:10-17). Lewis specifically indicates that the invention can do without the Library spreadsheet since the data stored therein can equally be looked up and inputted to Parameter spreadsheet from semiconductor data books (see at least col.5:12-31; col.6:10-15). Thus, contrary to Applicants' assertion, Lewis clearly teaches using "a single spreadsheet file per timing chart". The Applicants further allege that "*Lewis is taking commands and data from two files simultaneously to produce a timing diagram*" (page 8, 4<sup>th</sup> whole paragraph) (emphasis added), the Examiner respectfully requests that the Applicants cite the specific passage(s) in which the Applicants believe Lewis to be disclosing such feature.

The Applicants further contend that "*neither Lewis singly nor in combination with the VISIO reference teach line by line interpretation of a spreadsheet to produce each trace of a timing diagram*" (page 8, last paragraph). It is submitted that Lewis, alone, teaches "line by line interpretation of a spreadsheet to produce each trace of a timing diagram". As each row 74 in Parameter spreadsheet 38 specifies min/max values for delays, constraints, timing relationships between edges in the timing diagram (see at least col.4:32-34; col.6:10-20), and each signal (i.e., "trace") in the timing diagram is comprised of edges (see at least col.4:45-67), it is inherent that, in order to draw and a signal, a set of lines (i.e., rows) from the spreadsheet which are "unique to a particular signal line intended to be displayed" has to be interpreted "line by line". Thus, Lewis clearly teaches "line by line interpretation of the spreadsheet to produce each trace of a timing diagram".

The Applicants further contend that "*it is not shown in those two references (Lewis and the VISIO references) how to draw each trace*" (page 8, 3<sup>rd</sup> paragraph). The Examiner strongly believes that limitations pertaining to "how to draw each trace" are recited in claim 1 and, as established in previous Office Action, are clearly anticipated by Lewis. The Examiner, thus, refers

the Applicants to rejection of claim 1, incorporated below in its entirety. Furthermore, assuming, *arguendo*, that "*it is not obvious that it will work before hand, nor it is obvious how to do it from the references*", and "*it is not shown in those two references (Lewis and the VISIO references) how to draw each trace ...*" (2<sup>nd</sup> & 3<sup>rd</sup> full paragraphs, page 8), the test for obviousness is not whether the features of a secondary reference (Microsoft Visio 2000) may be bodily incorporated into the structure of the primary reference (Lewis); nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (2<sup>nd</sup> full paragraph, page 8), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's arguments against the references individually (e.g., Yamazaki, Gorbet), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, Yamazaki reference is considered an appropriate addition, since it is pertinent to a particular problem with which the invention was concerned (i.e., reading from one end of the file to the opposite end of said file) (see MPEP 2141.01(a)). In response to the Applicants' relying the allegation that "Lewis is taking command and data from two files simultaneously to produce a timing diagram" as basis for arguing that Yamazaki "teaches the exact opposite from Lewis", as

established above with respect to the functions of Parameter spreadsheet and Library spreadsheet in Lewis's invention, Applicants' argument is deemed unpersuasive.

In response to Applicants' argument that Gorbet reference's to the spreadsheets "appears to be a reference to a data file of any type, not a spreadsheet file name" (page 8, 2<sup>nd</sup> to last paragraph), as established in previous Office Action, the reference to the data file is clearly a user-supplied spreadsheet data file name (see at least Gorbet C:\spreadsheets\financial.xls!A1:F1 col.1:32-40; LinkSource col.10:38-40).

5. In view of the fore going discussion, rejection of claims 4, 6, 10, 16-17 under 35 U.S.C. 102(b) and claims 1-3, 5, 7-9, 11-15 under 35 U.S.C. 103(a) is considered proper and maintained.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*
7. Claims 4-9, 10-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites an "independently operable" spreadsheet program (line 3) and an "independently operable" drawing program (lines 3-4). The term "independently operable" in claim is a relative term which renders the claim indefinite. The term "independently operable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "independently operable" is considered a relative term which renders the claim indefinite because it raises questions as to what constitutes an "independently operable" program. Is it supposed to be a program that can operate/execute without (i.e.,

independent) of any manipulations, or inputs from the user or other programs? How independent is the "independently operable" program? In other words, how much input and manipulation from external sources (i.e., user or other programs) does the program require in order to operate? Zero, five, twenty, or a thousand? What constitutes inputs? And how simple or complex are these inputs? Depending different measuring standards utilizing different types of inputs, different number of inputs with varying complexity, an "independently operable" program defined by one standard can differ greatly from the "independently operable" program defined by another standard.

Claim 10 recites "independently operable" in lines 4, and 7, therefore, is rejected for the same reasons cited above.

Claims 5-9, 11-17 are rejected as claims depending on rejected base claims 1, and 10.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

9. Claims 4, 6, 10, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al. (US 5790435), hereinafter *Lewis et al.*

As per claim 4, *Lewis et al.* teach method and an apparatus (e.g., see Abstract, see FIG.1, 2 & associated text) comprising electronic signals within a computer memory or transportable disk (e.g., see 14 FIG.1 & associated text) for operating a control program or software (e.g., see *computer program* col.2:57-59) for drawing a timing chart from spreadsheet

program (having a graphical user interface) data file accessible through an independently operable spreadsheet program (e.g., *Parameter Spreadsheet 38* FIG.4 & associated text) employing an independently operable drawing program (e.g., see FIG.4 & associated text, col.4:11-12, see *Diagram Window 36* FIG.3 & associated text) comprising, upon initiation of said program

- said control program containing a procedure or subroutine (e.g., see *function* col.3:64-67, col.4:20-25) for capturing data from said spreadsheet data file (e.g., see *Row 74, Row Number 76* FIG.4 & associated text), said control program containing a subroutine for sending (interpreted) commands interpretable by said drawing program (e.g., see *menus 60* FIG.3 & associated text) based on said captured data to said drawing program together with any associated datums within said data (e.g., see *Margin 88, Comment 90* FIG.4 & associated text), wherein said captured data contains commands (e.g., see *Min 84, Max 86, Formula 82, D 78*, FIG.4 & associated text, see *D and C and S* col.6:26-31, see *Delays* col.12:35-40) for each line (e.g., see *clock signal* col.1:24-25, see *42, 44* FIG.3 & associated text) of a timing chart (e.g., see *timing diagrams* col.1:19),
- said control program including a set of subroutines for interpreting said commands for identifying drawing actions (e.g., see *Min 84, Max 86, Formula 82, D 78*, FIG.4 & associated text, see *D and C and S* col.6:26-31, see *Delays* col.12:35-40) to be accomplished by said drawing program and wherein said control program commands said drawing program in conformity with said commands (e.g., see *Diagram Window 36* FIG.3 & associated text, see *PC monitor 12* FIG.1 & associated text).

As per claim 6, *Lewis et al.* teach the method as applied to claim 4 further comprising in said step of said control program commanding said drawing program in conformity with said commands, said drawing program produces a display modified by commands (e.g., see *Clock1 44, Sig1 42, Sig2 42, Data 42* FIG.3 & associated text).



10. Claim 10 recites limitations, which have been addressed in claim 4, therefore, is rejected for the same reasons as cited in claim 4.

As per claims 16-17, they recite limitations, which have been addressed in claim 4, therefore, are rejected for the same reasons as cited in claim 4.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

12. Claims 1, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (US 5790435), hereinafter, *Lewis et al.* in view of Microsoft Corporation, *Customizing Visio 2000 Software White Paper*  
<http://www.microsoft.com/technet/prodtechnol/visio/visio2000/maintain/custom.mspx> (hereinafter *Visio2000*).

As per claim 1, *Lewis et al.* teach method and an apparatus (e.g., see Abstract, see FIG.1, 2 & associated text) comprising electronic signals within a computer memory or transportable disk (e.g., see 14 FIG.1 & associated text) for operating a control program or software (e.g., see *computer program* col.2:57-59) comprising:

- capturing data from spreadsheet program (having a graphical user interface) data file (e.g., *Parameter Spreadsheet* 38 FIG.4 & associated text), wherein said data is organized by lines or rows (e.g., see *Row 74, Row Number 76* FIG.4 & associated text),

and wherein a set of lines contains all information needed for producing a single signal Line or a header/format line (e.g., see *clock signal* col.1:24-25, see 42 FIG.3 & associated text), and wherein there is a multiplicity of sets of Lines in a said spreadsheet program data file (e.g., see 74 FIG.4 & associated text, see scrollbar FIG.4 & associated text), said capturing including,

- for each for set of lines of said data file information unique to a particular signal Line intended to be displayed (e.g., see FIG.3 & associated text), capturing, from said spreadsheet program data file by communication of a procedure or subroutine (e.g., see *function* col.3:64-67, col.4:20-25) within said program with said spreadsheet program which is actively running (e.g., see *Parameter Spreadsheet* 38 FIG.4 & associated text, col.13:60), said data file information,
- interpreting in said procedure said data file information from said set of Lines in accord with a command (interpreted by the spreadsheet) for identifying drawing actions (e.g., see *Min 84, Max 86, Formula 82, D 78*, FIG.4 & associated text, see *D* and *C* and *S* col.6:26-31, see *Delays* col.12:35-40) from within said set of Lines.
- preparing said data file information in accord with said command in said procedure to instruct a drawing program (e.g., see *Diagram Window* 36 FIG.3 & associated text) to draw a signal line or a header/format line (e.g., 42, 44 FIG.3 & associated text, col.5:46-49, col.5:52-55) in accord with said command from within said set of Lines (e.g., see FIG.4 & associated text, see FIG.10 & associated text),
- operating the drawing program to provide a display file containing each said particular signal line and header/format line in accord with said captured data interpreted through said command from within said set of Lines pertaining to each said signal line or header/format line by procedure sending to said drawing program (e.g., see FIG.4 & associated text, col.4:11-12) a command (see *menus* 60 FIG.3 & associated text) and data parameters (e.g., see *Row* 74 FIG.4 & associated text) corresponding with each said set of lines together with said command for each said set of lines so that said

drawing program can produce a file containing sufficient information (e.g., see FIG.14 & associated text, see *files* col.22:50-52) for the drawing program to print (e.g., col.21:43-44), display, or draw a timing chart (e.g., see *timing diagrams* col.1:19) having each signal line and header/format line (e.g., see 42, 44 FIG.3 & associated text) incorporated therein (e.g., see *Diagram Window* 36 FIG.3 & associated text, see *PC monitor* 12 FIG.1 & associated text).

*Lewis et al.* do not expressly disclose the spreadsheet program data file being Excel spreadsheet program data file, the control program and procedure being a Visual Basic program and procedure, and the drawing program being a Visio program producing a .vsd file. However, *Visio2000* discloses a Visual Basic procedure within a Visual Basic program (e.g., see *built-in macros* pg.14 par.2 under section **VBA, Automation, and the Visio 2000 Object Model**) communicating with an Excel spreadsheet program for capturing data file information (e.g., pg.14 par.3 lines 16-18 under section **VBA, Automation, and the Visio 2000 Object Model**) and instructing a an instance of a Visio program (e.g., pg.2 par.1 lines 4-5 under section **Introduction**, see *Automation* pg.3 par.4 lines 1-8 under section **Go deeper with Automation**, pg.14 par.3 lines 4 and 8-9 under section **VBA, Automation, and the Visio 2000 Object Model**) to produce a .vsd file containing sufficient information (e.g., see *ShapeSheet.vsd* pg.9 Figure 7 under section **Making Symbols Smarthe ShapeSheet Environment**, pg.10 lines 8-11) for drawing charts and diagrams (e.g., see pg.1 par.1 lines 1-2 under section **Introduction**) using lines (e.g., pg.11 par.1 line 2 under section **Parametric Geometry**). *Lewis et al.* and *Visio2000* are analogous art because they are both directed to drawing charts and diagrams. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made modify the teaching of *Lewis et al.* with that of *Visio2000* to substitute the spread sheet program/file, control program/procedure and drawing program with Excel spreadsheet program/file, Visual Basic program/procedure, and Visio drawing program, respectively. And the motivation for doing so would have been attributed to the Visio software ability to be customized (e.g., add new functionality, import or modify graphics/symbols, create new symbols), offering

ease of use and flexibility in modeling/diagramming information/data for further analysis. In addition, Visual Basic is simple programming language designed to be used as a creating tool for customized procedures/subroutines to perform repetitive tasks, and enable manipulation of Visio drawing/functionality and link or integrate the Visio software with other applications via Automation.

As per claim 11, it recites limitations, which have been addressed in claims 1 and 10, therefore, is rejected for the same reasons as cited in claims 1 and 10.

As per claim 12, *Lewis et al.* (as modified by *Visio2000*) teach an apparatus as applied to claim 11 wherein said Visual Basic program subroutine for capturing said data and commands from said spreadsheet data file comprises a routine for requesting a row of data (e.g., col.13:60-62) from said independently operable spreadsheet program (see claim 1).

As per claims 13-15, they recite limitations, which have been addressed in claims 12 and 1, therefore, are rejected for the same reasons as cited in claims 12 and 1.

13. Claims 2-3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lewis et al.* in view of *Visio2000* further in view of Yamazaki (US 5983181), hereinafter, *Yamazaki*.

As per claim 2, *Lewis et al.* as modified by *Visio2000*, hereinafter **L2** teach the method as applied to claim 1. **L2** do not expressly disclose said sets of Lines of said data file are read in order from one end of the data file to the opposite end of said data file. However, *Yamazaki* discloses a method of reading each row of data from file in order from top end (e.g., see (1,A)-(1,D) FIG.36A & associated text, col.30:10-20) of the file to the opposite or bottom end (e.g., see (4,A)-(4,D) FIG.36A & associated text, col.30:10-20) of said data file (e.g., see FIG.36A & associated text). **L2** and *Yamazaki* are analogous art because they are both directed to

processing information stored in spreadsheet data files. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made to modify the teaching of *L2* with that of *Yamazaki* to include the reading of data within the file from top end to opposite or bottom end of the file. And the motivation for doing so would have been to enable the identification and grouping of items or cells having the same types or units to specify to a voice-synthesis module the order of which the items should be read out.

As per claim 3, it recites limitations, which have been addressed in claim 2, therefore, is rejected for the same reasons as cited in claim 2.

As per claim 5, it recites limitations, which have been addressed in claims 4, and 2, therefore, is rejected for the same reasons as cited in claims 4 and 2.

14. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lewis et al.* in view of *Visio2000*, in view of *Yamazaki*, and further in view of *Gorbet et al.* (US 5781190), hereinafter, *Gorbet et al.*.

As per claim 7, *Lewis et al.* as modified by *Visio2000* as modified by *Yamazaki*, hereinafter *L3* teach the method as applied to claim 5. *L3* do not expressly disclose wherein a user supplies the spreadsheet data file name to said control program. However, *Gorbet et al.* teach a method wherein a user supplies a spreadsheet data file name (e.g., see 320-324 FIG.3B & associated text, see 502 FIG.5 & associated text, see C:\spreadsheets\financial.xls!A1:F1 col.1:32-40, see *LinkSource* col.10:38-40) via a graphical user interface (e.g., see FIG.4E & associated text). *L3* and *Gorbet et al.* are analogous art because they are both directed to processing information stored in spreadsheets. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made incorporate the teaching of *Gorbet et al.* into that of *L3* to include the user supplying the spreadsheet data file name. And the

motivation for doing so would have been to enable to user to update the *LinkSource* (i.e., selecting new source spreadsheet file) containing data to be processed, presented or displayed.

As per claims 8-9, they recite limitations, which have been addressed in claims 7 and 4, therefore, are rejected for the same reasons as cited in claims 7 and 4.

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

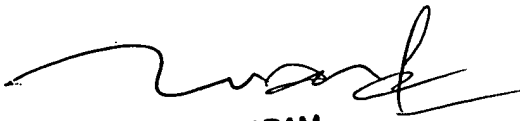
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chrystine Pham whose telephone number is 571-272-3702. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2192

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CP  
May 28, 2005



TUAN DAM  
SUPERVISORY PATENT EXAMINER